UNITED
NATIONS

A

General Assembly

Distr.
GENERAL

A/C.2/48/9
15 November 1993

ORIGINAL: ENGLISH

Forty-eighth session
SECOND COMMITTEE
Agenda item 98

INTERNATIONAL DECADE FOR NATURAL DISASTER REDUCTION

Letter dated 12 November 1993 from the Deputy Permanent Representative of Japan to the United Nations addressed to the Secretary-General

I have the honour to transmit to you herewith the text of the concluding statements of the International Decade for Disaster Reduction (IDNDR) Chiba International Conference, held in Japan from 27 to 30 November 1992, and of the IDNDR Aichi Nagoya International Conference, held in Japan from 1 to 4 November 1993 (see annexes).

I should be grateful if the text of the present letter and its annexes could be circulated as an official document of the General Assembly under agenda item 98.

(Signed) Shunji MARUYAMA
Deputy Permanent Representative

Annex I

CONCLUDING STATEMENT OF THE IDNDR CHIBA
INTERNATIONAL CONFERENCE

The IDNDR Chiba International Conference was held in Chiba from 27 to 30 November 1992, the third year of the International Decade for Natural Disaster Reduction. The theme was "Towards new frontiers against natural disasters". A total of 911 persons concerned with disaster management participated, including government officials, researchers and representatives of non-governmental organizations. They came from 37 countries and five international organizations.

The Conference focused on natural disasters such as typhoons, hurricanes and cyclones. It aimed for an exchange of information and opinions on experiences of such disasters, on countermeasures to be used against them between nations and cities faced with such disasters, and on the latest approaches to disaster management. A wide range of new topics in disaster reduction was discussed at the Conference, including the latest weather-forecasting techniques, early warning systems and the dissemination of disaster information utilizing mass media, the application of new technologies for disaster reduction, preparedness and recovery in business and industry, and the relationship between disaster mitigation and the environment.

Although disaster reduction efforts are continuing around the world, many persons still fall victim to natural disasters, and there is a tendency for social and economic damage due to such disasters to escalate. The effects of natural disasters are felt particularly in developing countries, where the social and economic damage cannot fail to have an impact on the development of the country as a whole. In order to reduce the damage caused by disasters even a little, it is important to store and share information and experiences gained from previous disasters, and put that information to good use in future disaster management. Further, since environmental degradation due to unreasonable development is one cause of natural disasters, it is important to increase awareness of the need for "disaster reduction for sustainable development".

Regarding meteorological observation and analysis and the issuing and dissemination of warnings, it is important to improve the accuracy of forecasting, particularly that of tropical cyclones and localized rainstorms, and adjust the quantity of information and the forms of presentation used in issuing warnings to the regions concerned. It is also important to establish better means of communication which take account of the level of knowledge and the psychology of the end recipients of the information.

In order to apply new technologies to disaster reduction, since the disasters to be dealt with are of uncertain magnitude and type, we need to construct intelligent systems with greater adaptability than hitherto, systems which are also strong enough to withstand disasters. For example, the development of practical disaster-preventing robots will require comprehensive development over a long period of time. Remote-sensing was recognized as an extremely powerful tool for the monitoring, management and forecasting of disasters. In particular, a combination of global positioning systems (GPS) and

geographic information systems (GIS) would be effective in risk assessment and the mitigation of disasters and would be helpful for constructing a model of an early warning system.

In present-day society, it is necessary to recognize the role to be played by corporations as well as by Governments and citizens. For the improvement of social stability, the disaster management activities of corporations are extremely important. Three roles should be given to corporations:

(a) Ensuring the safety of employees and communicating with their families as a responsibility of employers;

(b) Rapid recommencement of business activities, to ensure corporate profitability and the maintenance of social functions;

(c) Contribution to local communities.

At present, disaster management measures by corporations are not necessarily adequate.

A problem facing developed and developing countries alike is the environmental background to natural disasters. Changes in the types of land use, the spread of urbanization, and excessive deforestation bring changes to regional environments, increasing vulnerability to natural disasters, and inviting changes in the type and scale of the disasters experienced. Furthermore, at present these effects are felt first of all by poor people in developing countries.

The tasks to be assumed by each country and the tasks requiring international cooperation were discussed at the Conference, based on a recognition of the problems outlined above. The major tasks discussed were the following:

1. To establish international and interdisciplinary research networks and databases for disaster management.

2. In addition to expanding meteorological forecasting networks and improving forecasting technology, to try to develop and apply basic scientific techniques to improving forecasting accuracy.

3. To establish dissemination systems for disaster information in the areas where they are not yet installed.

4. To recognize the importance of the mass media in disseminating disaster warnings, and to establish suitable means of disseminating warnings.

5. To make efforts to increase awareness and knowledge of disaster preparedness, giving consideration to the uncertainties involved and the different needs of the various regions, in order for the general public to make effective use of disaster warnings.

6. To attempt an international comparative study of the factors, including geographical, economic, cultural and institutional differences, affecting the promotion of corporate disaster management.

7. To continue a study on the contributions to be made by international corporations to developing countries based on the internationalization of the economy and the transfer of disaster reduction technology.

8. To recognize the need for an assessment of the effects of development on the environment and the increases in the scale of natural disasters which it may involve.

9. To make scientific and quantitative evaluations, with international cooperation, of the relationship between disaster mitigation and environmental problems, and to recognize the relationship as a part of disaster science.

10. To promote environmental and disaster preparedness education and to increase awareness of disaster preparedness for residents of regions inherently at risk.

Proposals were also made at the Conference for specific activities to be undertaken under the IDNDR framework. These were as follows:

1. To reinforce the regional specialized meteorological centres of the WMO in order to improve forecasting and warnings of tropical cyclones.

2. To encourage relevant organizations, governmental organizations and the industrial sector to set up a working group composed of specialists in the fields of robotics and disaster reduction for the purpose of exchanging information and opinions on the present situation and future goals with regard to research and development of disaster-preventing robots. (Some participants in the Conference confirmed their intention to set up such a working group and continue discussion.)

3. To publish, in book and CD-ROM digital formats, maps on disaster management and examples of its application, using remote-sensing and GIS, in cooperation with disaster specialists and remote-sensing scientists.

4. To hold seminars and workshops on remote-sensing and GIS for the monitoring and management of natural disasters in order to promote international cooperation among disaster specialists and remote-sensing scientists.

5. To request the industrial sector to set up institutional frameworks, including self-imposed inspection by enterprise associations, of corporate disaster management systems, and to establish voluntary organizations which promote the sharing of information and cooperative activities related to corporate disaster management.

In addition, some examples of where specific activities had already begun were reported. For example, a group composed of technicians and researchers concerned with seismic disasters has organized the World Seismic Safety Activity Initiative, with the aim of preventing and reducing world earthquake damage. A technology is being developed for low-cost and disaster-resistant housing.

Another group has begun to set up an international disaster management research body.

We are nearly at the end of the third year of the International Decade for Natural Disaster Reduction. However, the goal of reducing loss of human life and property damage has not been adequately met. In spite of the fact that numerous meetings have been held, during and after the preparatory period, and enormous international projects have been proposed, there are very few cases of concrete action. If the situation persists, it is doubtful whether much will be achieved during the remaining seven years, to the year 2000. This is due to the fact that awareness of the IDNDR differs from region to region and from organization to organization, and that different organizations are responding in different ways. The greatest problem of all remains that of financial backing for the various proposals.

In order to improve the situation, it is necessary to broaden the common base of awareness among individuals, organizations, countries and international organizations. The World Conference to be held in 1994, the mid-term year of the International Decade for Natural Disaster Reduction, should provide a stimulus in that regard. At that conference, through a review of the first five years of the International Decade and a clarification of the goals for the last five years, based on the review, a strategy must be adopted for concentrating global activities in pursuit of the aims of the Decade. The results of the World Conference on Natural Disaster Reduction, to be held in Yokohama in May 1994, will determine the success or failure of IDNDR.

We, the participants in the 1992 Conference, holding the views mentioned above, submit the concrete proposals outlined above to the relevant organizations and hope that they and the activities already under way will be realized. We also hope that similar proposals and activities will take place world wide, that they will be reported at the 1994 World Conference, and that they will prove a stimulus to additional energetic activities.

Annex II

CONCLUDING STATEMENT OF THE IDNDR AICHI/NAGOYA INTERNATIONAL CONFERENCE

The IDNDR Aichi/Nagoya International Conference was held in the city of Nagoya, Aichi Prefecture, from 1 to 4 November 1993, the fourth year of the International Decade of Natural Disaster Reduction, with the theme of "Disaster management in metropolitan areas for the twenty-first century". A total of 1,100 experts involved in the field of disaster prevention, including administrators, researchers and representatives of non-governmental organizations, participated. They came from 46 countries and nine international organizations.

Disasters occurring in metropolitan areas can have a grave impact on other domestic and international communities and their economies as well as urban residents. Moreover, metropolitan areas have become increasingly vulnerable to disasters as a result of such developments as the overconcentration of population and economic infrastructure in urban areas, the transformation in urban lifestyles and lack of citizen awareness. It should be recognized that disaster prevention in urban areas is one of the most important factors contributing to sustainable development in developing countries, where urbanization is rapidly advancing.

In confronting these realities, the Conference participants presented reports and exchanged views on the following agenda items: disaster risks and the impact of damage in metropolitan areas; disaster countermeasures in urban planning; disaster countermeasures for lifeline facilities, schools and hospitals; the response of local governments and information strategies; citizen participation in volunteer activities; advanced disaster research and prevention; and other topics.

It was recognized that natural disasters now lead to "complex emergencies" in which political, social and economic turmoil, population growth, poverty, environmental degradation and other factors aggravate the effects of the disasters, resulting in compounded damage. In developing countries in particular, population and capital inflows rapidly concentrate in urban areas, and thus the risks of a "complex emergency" there have become increasingly serious.

It was also recognized that natural disasters can destroy economic infrastructures and that ethnic, cultural and economic diversity should be considered when extending humanitarian aid to disaster victims. Furthermore, it was pointed out that, in addition to the need for relief measures for disaster-stricken areas, there exists a need to prepare for disasters by improving methods of prediction, forecasting, and prior-assessment of hazards with the latest scientific technologies.

On the basis of the reports presented and discussions held at the Conference, the following specific suggestions were made to central and local governments, researchers and other authorities:

1. To facilitate risk assessment in urban areas where population, capital and resources are concentrated, convenient methods which meet the current needs and capabilities of each region and country should be developed and disseminated.

2. Planners of development projects must take into account "disaster hazards" when formulating and implementing their plans. To raise the awareness of residents, politicians and others, accurate data should be provided through effective presentation methods. For example, the cost of disaster damage should be estimated, and methods of visual data analysis should be developed and widely used.

3. The minimum level of functioning of lifeline systems to be maintained during an emergency and their positions in the disaster prevention plans should be clarified, taking into account the characteristics of the country or region. It is necessary to strengthen the strategic structures of lifeline systems.

4. To ensure the safety of hospitals, schools and other important public facilities and to maintain their functioning as bases in an emergency, effective regulations on building design should be established and disseminated. Citizens and the administrators of such facilities should be made aware, through education, of the importance of ensuring the security of critical facilities.

5. It is important to disseminate information and maintain a communications system during an emergency. The accuracy of information monitoring systems concerning meteorology, river levels, volcanos and other phenomena should be improved, and the swift transmission of such information to citizens should be encouraged.

6. Voluntary disaster prevention activities by private volunteers are important and should be encouraged and efficiently utilized. The conditions surrounding these activities should be improved. The necessary staff should be assembled and trained regularly in communication, first-aid and other specialized fields. Their priorities should be clarified in the disaster prevention plan. Affiliations with public organizations should be strengthened.

7. Global networks and global projects related to disaster monitoring, prediction and prevention technologies should be established, with an emphasis on international cooperation.

8. Adequate technologies for predicting disasters should be developed. They should reflect the properties of natural phenomena as well as the geographical and societal features of the regions and cities in which they will be applied.

The International Decade for Natural Disaster Reduction began in 1990. In order to review previous activities and formulate future action programmes, the World Conference on Natural Disaster Reduction is to be held in Yokohama from 23 to 27 May 1994. The Conference is highly significant, since it will accelerate the progress of future IDNDR activities.

The participants of the IDNDR Aichi/Nagoya International Conference set the following goals to ensure the success of the World Conference:

(a) To assist donor countries and international organizations in disaster prevention, in light of the insufficient involvement of developing countries in disaster-prevention activities;

(b) To promote IDNDR international demonstration projects and other disaster-prevention projects which will be completed during the IDNDR and which are expected to attain significant success;

(c) To establish a network comprising national Governments, international organizations, universities and other establishments for the exchange of information and data for use in the assessment and planning of disaster reduction. A centre serving as the core of such a network should be set up;

(d) Although emergency aid should be targeted at supporting self-help efforts, a system should be formulated that responds swiftly to a disaster emergency with humanitarian assistance.

We expect that the above appeals will be taken up by the World Conference on Natural Disaster Reduction and that the Conference will achieve much progress.

It is impossible to prevent natural hazards from occurring; however, it is possible to minimize their damage through the application of wisdom and effort.

We hope that all countries, local governments, researchers, international organizations and others concerned will make further efforts to cooperate in the activities of IDNDR, with the aim of solving the problems and realizing the proposals addressed at the Conference. To achieve success, each of us must fully recognize the importance of disaster prevention.

We hope that disaster countermeasures for metropolitan areas will be swiftly and efficiently developed, with the Conference as a stepping stone, and that the damage caused by natural disasters will be steadily, if not totally, alleviated.

UNITED
NATIONS

A

General Assembly

Distr.
GENERAL

A/C.2/48/10
18 November 1993

ORIGINAL: ENGLISH

Forty-eighth session
SECOND COMMITTEE
Agenda items 91 (e) and 99

DEVELOPMENT AND INTERNATIONAL ECONOMIC COOPERATION: ENVIRONMENT

IMPLEMENTATION OF DECISIONS AND RECOMMENDATIONS OF THE UNITED NATIONS CONFERENCE ON ENVIRONMENT AND DEVELOPMENT

Letter dated 16 November 1993 from the Chargé d'affaires a.i. of the Permanent Mission of Yugoslavia to the United Nations addressed to the Secretary-General

Upon instructions of my Government, I have the honour to submit to you a document of the Ministry for the Environment of the Federal Republic of Yugoslavia, containing the Resolution of the Policy of Environmental Protection of the Federal Republic of Yugoslavia.

I should be grateful if you would have the present letter and its annex circulated as a document of the General Assembly under agenda items 91 (e) and 99.

(Signed) Dragomir DJOKIC
Ambassador
Chargé d'affaires a.i.
of the Permanent Mission of
Yugoslavia to the United Nations

ANNEX

Document of the Ministry for the Environment of the Federal Republic of Yugoslavia, containing the resolution on the policy of environmental protection in the Federal Republic of Yugoslavia *

* Circulated in the language of submission only.

Pursuant to the provisions of item 4, Article 77 of the FRY Constitution stipulating that the Federal Republic of Yugoslavia shall, through its bodies, formulate the policy and adopt and apply federal laws, other regulations and enactments in the field of environmental protection,

Proceeding from:

- the constitutionally established and internationally recognized human right to life in a healthy environment, to timely information on its status, and from the responsibility of every human being to preserve and adequately use the environment;
- the provisions stipulating that natural resources are state property;
- the possibility for the member republics to transfer their responsibilities and competences from
- the right to development in a healthy environment, which entails adjustment of the structure and timing of human activities to the structure and time patterns of the environment so as not to call into question, by satisfying the needs of present generations, the right and possibility of future generations enjoying healthy environmental conditions (sustainable development);
- the principle that poverty is the worst environmental threat and that the eradication of poverty and the alleviation of its consequences pave the way for adequate environmental management;
- the fact that environmental pollution in one country may have adverse effects on neighbouring states and on a global level;
- the need for developing effective means and mechanisms to manage existing pollution and control new pollution, as well as the need for attaining sustainable development that would establish the necessary correlation between economic activities and environmental requirements;
- the Federal Republic of Yugoslavia's current responsibilities stemming from the international documents it has endorsed including, among other, the Environment and Development Declaration - the Rio Declaration and the Agendas for the 21st century;
- the fact that the Federal Republic of Yugoslavia is part of the international community and that it should play an active role in formulating and implementing international rights and commitments;
- the need for the Federal Republic of Yugoslavia to co-operate with other states and international organizations globally, in the spirit of partnership, and on principles of equality and non-discrimination, and to share with other states on a differentiated basis the responsibility for preserving and rehabilitating the health status of the environment, i.e. the Earth's global ecosystem - biosphere;
- the undeniable fact that in the development of long-term environmental protection programmes for Europe, the Federal Republic of Yugoslavia cannot be bypassed nor isolated, and that such programmes should form a basis for establishing close regional relations;
- the significance of regional and international cooperation in the field of environmental protection and promotion and the development and comprehensive application of clean technologies with a view to addressing existing problems, preventing adverse effects on human health and ecosystems, and the economical use of raw materials and non-renewable resources;
- the stand that international assistance is conditioned as well by the effective meeting on the part of the Federal Republic of Yugoslavia of the international obligations it has assumed, as well as by the implementation of its environmental protection and promotion policy;

Considering that:

- the Federal Republic of Yugoslavia has considerable natural resources and a non-degraded environment which should be preserved;
- the Yugoslav economic space is unified but heterogeneous in terms of environmental specificities;
- the status of the environment, the considerable earlier efforts notwithstanding, is unsatisfactory and that it should be continuously upgraded;
- difficulties are possible to surmount by defining and applying a concept of sustainable development to be based on know-how, economical and effective utilization of domestically available natural resources, global experience and an integral approach to environmental protection on the basis of the 'polluter pays' principle;
- there is major potential in terms of professional personnel capable of making their full contribution to development of integral protection and promotion of the environment in the Federal Republic of Yugoslavia, by using scientific achievements and modern technologies;

/...

- sustainable development is possible to achieve through a joint effort of all entities and individuals in the society;
- for environmental problems to be effectively addressed, active participation in the decision-making process of the public, along with that of all competent and other entities, needs to be ensured;
- environment have been taken to date reflecting the advance of science, relevant international commitments and indigenous know-how and experience;
- the continuity between the finalized, initiated and planned activities aimed at further developing an integral approach to environmental protection and promotion needs to be maintained.

THE FEDERAL GOVERNMENT
HAS HEREBY ADOPTED A
RESOLUTION
ON THE POLICY OF ENVIRONMENTAL PROTECTION IN THE
FEDERAL REPUBLIC OF YUGOSLAVIA

I. OBJECTIVES

The environmental protection policy shall have the following objectives:

1) to create conditions for building a humane society in the Federal Republic of Yugoslavia that will continue to develop bearing constantly in mind environmental concerns and the right of future generations to meet their environment-related needs at the same or higher level;
2) to provide the prerequisites for preservation, economical use and prevention of degradation of natural resources; for the prevention of uncontrolled pollution and further degradation of the environment; and for removal of the effects of earlier environmental pollution and degradation;
3) to manage the environment in a manner conducive to protecting and promoting public health;
4) to develop an integral protection and promotion system for the environment and the quality of life; upgrade the existing protection system for the natural and man-made environment; and provide an institutional framework for the effective operation of that system;
5) to establish conditions for analyzing and taking into consideration the interests arising from the concepts of sustainable development and environmental protection and promotion in designing urban developmentand land use plans;
6) to gradually introduce the 'polluter pays' principle, by means of uniform systemic solutions for the country as a whole;
7) to enable the development of pollution monitoring technologies suited to the specific features of the region and the attained rate of development;
8) to maintain a satisfactory environ-mental balance in Yugoslavia and its participation in the protection of the biosphere;
9) to prevent the import and transfer of dirty technologies.

II. PRINCIPLES

The environmental protection policy shall be based on the following principles:

- **Integrity.** Environmental protection and promotion as an integral part of development, implies integrity in formulating and pursuing environ-mental policies, in planning, natural resource management and decentralized action-taking;
- **Priority of interests and objectives.** Individual interests shall be sub-ordinated to general ones, and short-term objectives to long-term ones.
- **Quality.** Quality control and supervision of work, research and performance at all levels are essential for an effective pursuit of the environmental protection policy.
- **Effectiveness.** The actions taken and investments made in pursuit of this policy must be warranted in terms of the objectives they are intended to attain;
- **Market neutrality.** The environmental protection policy will not hamper the interplay of market forces nor favour some firms at the expense of others in terms of their competitiveness in the market, nor will it support or encourage monopolistic practices;

/...

- **Information.** Full and timely information regarding the state of the environment, the policy of its protection and the implementation of that policy should be accessible to the public;
- **Programme orientation.** The policy shall be implemented under environmental protection and promotion programmes and projects;
- **Prevention.** Pollution is prevented at the source in order to avoid or reduce it to a minimum;
- **The polluter-pays principle.** The polluter of the environment shall bear the costs of pollution and pay compensation charges in cases when pollution exceeds the established limits;
- **Solidarity**. Administrative expenses and the cost of implementing the environmental protection and promotion systems shall be borne by all the factors involved on the basis of solidarity.

III BASIC FEATURES OF THE STATE OF THE ENVIRONMENT

1. The Environment and Development

1.1. Regardless of the strategic options which consider it necessary, an integral approach to environmental protection and promotion has not been established on any level.

1.2. Environmental protection is insuf-ficiently effective, and preventive protection measures are not applied to an appropriate degree.

1.3. In the past period, developmental objectives have been channelled towards increasing production and the social product, without giving due consideration to environmental protection and promotion criteria, the quality of technologies, products and services.

1.4. As a rule, the protagonists of development lay emphasis on short-term effects, namely, on the generation of profit at the expense of depleting natural resources.

1.5. The integration of economic and environmental objectives in the Federal Republic of Yugoslavia is below a level ensuring the keeping abreast of Europe with respect to development.

1.6. The existing economic structure and distribution of economic facilities in our country indicate that environmental and economic criteria have persistently been neglected.

1.7. Natural resources, especially their biological diversity, have not been sufficiently researched.

1.8. The immediate damages from the uneconomical exploitation of natural resources and environmental pollution are not evaluated.

2. Water and Sea Resources

2.1. The Federal Republic of Yugoslavia is relatively poor in water resources, especially if only the resources originating in its territory are taken into consideration.

2.2. Seasonal and long-term variations in the available quantities of water are quite pronounced, so that the differences between low water tables in dry and humid years can be even threefold and more.

2.3. The use of water, as well as of production technologies, is uneconomical. The development and maintenance of infrastructure are inadequate, so that cases of losses of water in the distribution system exceeding 30% in the Federal Republic of Yugoslavia are not infrequent.

2.4. The quality of water resources in the Federal Republic of Yugoslavia is endangered in many ways.

2.5. In the Federal Republic of Yugoslavia, approximately 840 million m^3 of water is drawn a year on the average. The annual production of waste water amounts to 600 million m^3 (20 m^3 per second). Less than 10% of all the waste waters is purified, and the problem is most acute in urban and industrial zones. Of all the waste waters, only 9.5% is purified (2.3% mechanically, 0.4% chemically, 4.2% biologically and 2.6% by any combination of two or more methods).

2.6. Out of the population connected to the water supply system, only 44.9% are connected to the sewage system.

2.7. The quality of water of many rivers is not in conformity with the regulations, and is, on some locations, below all permissible categories, and on other locations limits their utilization, or adversely affects agricultural production and aquaculture.

2.8. The problem of the pollution of rivers, lakes,accumulation lakes and the sea with nutrients is especially pronounced.

2.9. In coastal semi-locked areas of the Adriatic Sea, eutrophication is becoming a serious problem.

2.10. The treatment of waste waters in urban and tourist settlements and along the Adriatic coast is inadequate.

2.11. The protection of the sea and coastal belt against pollution from both continental and m...ne sources, as well as the dumping of wastes into the sea, including the protection of the Adriatic Sea as part of the Mediterranean poses a particular problem. In the part of the Adriatic Sea belonging to Yugoslavia, as well as in the broader space of the Adriatic Sea and the Mediterranean, insufficient attention is devoted to control and accident protection. An additional threat to the environment of the Adriatic Sea and the coastal belt is the potential exploitation of oil and natural gas. The effects of the works carried out so far have not been investigated.

2.12. The development of tourism is attended by the construction of numerous accommodation facilities, roads and infrastructure, while development plans did not take account of environmental considerations in the coastal region, particularly effects on the marine eco-system.

3.Soil

3.1. It is assessed that over 80% of the soil in the Federal Republic of Yugoslavia is, to a greater or lesser degree, affected by erosion. Approximately 40% of the soil is affected by strong erosion processes (excessive, high and medium erosion).

3.2. In mountainous regions, soil degradation processes have slowed down in recent years due to reduced livestock breeding and other activities which cause these processes.

3.3. The problem of the conversion of soil use and the transformation of fertile soil into construction sites and infrastructure locations is especially pronounced.

3.4. Owing to intensive agricultural development, theinadequate use of fertilizers and plant protection agents, intensive ploughing, irrigation and water management, including the cultivation of particular species, soil quality is deteriorating, and some locations that are habitats of various species of wild plants and animals are disappearing (hedges, bushes, border line herbage).

3.5. In some regions in Vojvodina increased soil salination and alkalinization have been registered, and due to the excessive application of chemicals, the most affected areas include Pančevo, Subotica, Vršac, Sremska Mitrovica, Sombor, Bečej and the Zeta plain.

3.6. Sites characterized by severe soil degradation due to adverse industrial effects include the regions of Bor, Trepča and Pljevlja, as well as the communes of Priština, Kosovska Mitrovica, Obilić and Kosovo Polje. In Kosovo, the soil in the vicinity of mines and industrial facilities is being degraded at an accelerated pace and without control due to strip mining,waste, ashes, slag, heavy metals, waste waters and gases, whereby measures of protection, rehabilitation and recultivation, except in small areas have not been put in place. Some settlements are in a particularly grave situation.

4. Air and the Atmosphere

4.1. Sulphur-dioxide (SO_2) emissions are the most frequent sources of air pollution in the Federal Republic of Yugoslavia, and are higher than it could be expected considering the level of industrial and economic development. The highest SO_2 emissions are those from obsolete industrial facilities and thermal power plants which have not been equipped with smoke gas desulphurizing systems.

4.2. Nitrogen-oxide (NOx) emissions originating from thermal power plants and industrial facilities are lower per unit of generated energy in the Federal Republic of Yugoslavia than in West European countries, except in transport, where they are somewhat higher.

4.3. On certain isolated locations, the air is polluted with toxic pollutants (cadmium, benzol,radon and asbestos, etc.) which affect human health and the animal and plant life and are airborne, but can also be transmitted through food and water.

4.4. According to available data, in respect of trans-boundary airborne pollution the Federal Republic of Yugoslavia "receives" more than its "gives", in particular sulphur-dioxide and nitrogen-oxide, as well as particles.

4.5. The contribution of agriculture and forest fires to pollution is not monitored and no elements are available for its evaluation.

5.Forests

5.1. The current status of forest stands in the Federal Republic of Yugoslavia is on the whole inadequate, both from the aspect of the use of the production potentials of the stands and in respect of providing the other functions of forest ecosystems.

/...

5.2. An analysis of the present status indicates the degradation of areas under forests in all regions;in the Federal Republic of Yugoslavia one third of the forests has been destroyed. Increasingly smaller surfaces are under forests and such a trend is expected until the year 2000.

5.3. In Serbia, forest are disappearing for the most part along river belts and in the vicinity of water accumulations and drainage systems, due to the changed level of ground waters, and in Montenegro, in the north-west part where industry is located.

5.4. Forest ecosystems are also threatened by inadequate economic activities, the conversion of forest land into construction and industrial sites including transportation infrastructure, as well as the insufficient level of forest renewal.

5.5. Fires and severe and prolonged droughts are the most important abiotic factors.

5.6. Epidemics of forest die-back that have been taking place for more than a decade are a serious threat to large forest areas. Of special concern is the incidence of acute beech die-back. This epidemic has been registered on a number of sites in Fru□ka Gora and eastern Serbia, but not in southwestern Serbia and Montenegro.

6. Sensitive Ecosystems

6.1. Mountain ecosystems, sensitive ecosystems and natural resources, due to their uniqueness, their irrecoverable and irreversible nature as well as their relevance for ecological processes on the global level, represent an important resource of the Federal Republic of Yugoslavia. Parts of mountains above the timberline, which as a rule include the most endangered stenoendemic plant and animal species and relicts and which bear the greatest pressure of the development of tourism and construction of telecommunication facilities (relays,repeater,cable railways, etc.) are particularly vulnerable.

6.2. Sensitive freshwater ecosystems, as well as the environment of specific freshwater organisms are characterized by sensitive and fluctuating physical and chemical properties on which the living organisms in it depend.Large areas of lowland water ecosystems around the Sava, Danube, Begej, Tisa, Morava, Bojana, Zeta, and other rivers are particularly sensitive and irreplaceable for the preservation of natural resources and environmental protection. The majority of these regions include specific natural resources of national and international relevance (Obedska bara, the lakes of Skadar, Ludoš, Carksa bara, etc.).

6.3. Glacial lakes, whose natural succession can easily be disturbed and accelerated by anthropogenic eutrophication and pollution are especially sensitive, and are the environment of some endemic species.The lakes are of exceptional scenic beauty (the Durmitor, Šar Planina and other lakes).

6.4. Mountain peat marshes and bogs, mountain wells and springs, with their specific flora and fauna are particularly endangered and sensitive ecosystems.

6.5. In the Federal Republic of Yugoslavia, brackish water systems are rare but very sensitive Salt lakes and ponds in Vojvodina are among the most important habitats of this kind, and are subject to flood control activities which threaten to transform their basic features. There is a number of important brackish ecosystems on the Montenegrin coast which are concentrated around the estuaries and lower sections of smaller and larger watercourses, and particularly around the mouth of the Bojana river, and Zogajsko blato.

6.6. Arid open and semi-open ecosystems, namely continental sandy soils as well as steppe ecosystems on loess terraces, deserts and breckland have, as a rule, been treated in past development plans as "bare regions."

6.7. In the Mediterranean and sub-Mediterranean belt of Montenegro there are also specific ecosystems characterized by semi-desert ecological conditions.

7. Natural Heritage and Biodiversity

7.1. The Federal Republic of Yugoslavia is rich in exceptional natural values, among which priority should be given to specific natural resources. Among the most significant natural resources in the broader sense of the word is natural diversity which includes climatic, geological, hydrogeographic, orographic, scenic (biomic), pedological, biological and eco-systemic diversity. In line with international criteria, some natural regions have been included in the world natural heritage.

7.2. On the territory of the Federal Republic of Yugoslavia seven different continental biomes have been identified (as compared to Western Europe where there are 3 to 5). There are about 5,000

vascular plant species, over 1,000 species of vertebrates and over 100,000 species of invertebrates with a significant percentage of endemic species and sub-species, especially among some groups.

7.3. The research carried out so far indicates that in Serbia approximately 440 plant and about 480 animal species are endangered in different degrees, while to date 83 plant and 382 animal species have been protected.

7.4. Among the rare and endangered species in Montenegro, 52 plant species as well as 314 animal species and one whole genus (bats) are under protection.

7.5. In the territory of the Federal Republic of Yugoslavia, six areas of nature have been evaluated and protected by international treaties as areas of nature, or natural regions, of international importance.

8. Architectural heritage

8.1. The territory of the Federal Republic of Yugoslavia, a crossroads of a variety of cultures and religions, is rich in highly valuable cultural landmarks. These landmarks date back to different periods - pre-historic, ancient Greek, Roman, Byzantine and early Christian,Renaissance and the Baroque period as the peak of medieval architecture.

8.2. Cultural landmarks are endangered by the extensive development of cities, industrial and tourist facilities, road infrastructure, electric power installations and by water and air pollution.

9. Waste and hazardous substances

9.1. The Federal Republic of Yugoslavia produces relatively large quantities of different types of waste which, in view of their quantity or properties, are a threat to the environment.

9.2. Estimates made on the basis of production and inputs used show that the Federal Republic of Yugoslavia generates over 8 million tons of ashes in its energy installations, over 900,000 tons of low toxic industrial waste (waste gypsum, red sludge, pyrite burns, etc.), over 900,000 tons of different industrial wastes dumped mostly together with solid waste (with a high hazardous waste content) and around 150,000 tons of extremely hazardous waste. Flotations of non-ferrous minerals produce considerable quantities of toxic and low-toxic wastes.

9.3. Major producers of hazardous waste are the chemical, oil, petrochemical, metal, paper, leather and textile industries and transport. Minor producers include car repair shops, surface metal working shops, dry cleaners, etc. Many wastes have a high content of non-degradable products and chemicals which pollute the environment.

9.4. The mode of disposal, transport and treatment of hazardous waste in the largest part of the country is not adequate. Hazardous waste is dumped on inappropriate sites or factory grounds, without taking adequate safety precautions.

9.5. Waste recycling has been understood solely as a technical matter, rather than the principal element of a policy for the rational utilization of natural resources and obtaining raw materials and energy. Around 70 per cent of the communes organize the collection of secondary raw materials.

9.6. Processing technologies and related stimulating measures are inadequately developed or elaborated.

9.7. Primitive technologies continue to prevail in communal waste removal and involve open-air disposal, often even without basic sanitary permits.

9.8. The problem of hazardous waste management in production, trade, application and transport requires the implementation of long-term environmental protection measures, including efficient accident prevention.

10. Ionizing radiation

10.1. The radio-active waste-related risks depend on the type and characteristics of waste (low, medium and high radioactivity) and the level of management safety. There are mainly sources of medium and low radio-active waste in Yugoslavia. Radio-active waste is not processed, and its importation is banned.

10.2. The human health hazards and environmental risks posed by radio-active waste discharged in the territory of the Federal Republic of Yugoslavia are incomparably lower than the possible adverse transboundary effect of a nuclear accident in any of the neighbouring countries (Hungary has 1,645 MWe of installed nuclear power, Bulgaria - 3,538 MWe and Slovenia - 632 MWe).

10.3. Temporary storage of radio-active wastes originating from the territory of the country as a whole has been solved safely, but the issue of final storage has still not been adequately addressed.

/..

10.4. The problem of radio-active lightning rods has not yet been settled, although a program has been designed for dismantling 4,270 radio-active lightning rods in Serbia by 1996.

11. Noise

11.1. The problem of noise is most frequently of a local nature and related to traffic and particular industrial facilities so that fairly small groups of citizens are exposed to higher noise levels, mostly those in their immediate vicinity.

11.2. The zoning of settlements according to permitted noise levels has only been embarked upon in Belgrade. Noise levels have been systematically monitored in Novi Sad, Nis, Zrenjanin and Belgrade. Measurements indicate a decline of the noise level over the past few months by 2-3 dB(A) by day and by over 5 dB(A) at night.

12. Global environmental concerns

12.1. Global environmental problems are assuming priority importance worldwide following the expressed determination of the world's statesmen to jointly address the most critical questions in this field.

12.2. The steady growth of gas emissions on the global level due to fossil fuel combustion raises substantially gas concentrations in the atmosphere, which cause "the greenhouse effect" leading to its additional global overheating.

12.3. Global climate change can: endanger human health and well-being; bring down food production, particularly in many sensitive regions; change the distribution and seasonal availability of drinking water wells; undermine global economic growth and exacerbate poverty; and speed up the extinction of animal and plant life.

12.4. Over the past few years, the state of the ozone layer has deteriorated beyond all forecasts.Damage has been observed along all geographic latitudes and in all seasons of the year.

12.5. According to the criteria set out in the Montreal Protocol, the Federal Republic of Yugoslavia belongs to the group of developing countries whose calculated per capita consumption of controlled substances is below 0.3 kg per year and is eligible for the use of resources of the special Multilateral Fund established by the developed countries.

13. Legislation

13.1. A number of federal and republic laws and other regulations have been adopted in the Federal Republic of Yugoslavia without prior harmonization.The standards are not uniform nor have they been brought in compliance with the EC regulations. Punitive policy is lenient.

13.2. The institutions and agencies in charge of environmental protection are not adequately staffed and organized for efficient operation.

13.3. The administrative structures, which pass decisions under social pressure, also endanger the environment indirectly by seeking to achieve their objectives as quickly as possible.

13.4. The valid laws and other regulations are largely restrictive, and economic instruments are insufficiently utilized.

13.5. The scope and responsibilities of particular federal and republic government administration agencies are inadequately delimited (horizontally and vertically) and harmonized.

13.6. Inspection of regulations enforcement is ineffective, particularly in the current economic situation.

14. Financing

14.1. The environmental protection policy in our country has been largely viewed as an activity of state interest. The funds of the enterprise sector, the population and other groupings in the society, channelled to pursuit of environmental protection policy have been modest and confined to state budget replenishment, from which a minor share was set aside for environmental protection purposes.

14.2. There are no adequate methods for evaluating development projects and consumption aspects which may cause pollution. The economic effects of environmental protection and promotion are not assessed by standard economic methods.

14.3 The growing awareness of the need to preserve the quality of the environment is not made sufficient use of in taking rehabilitational and promotional measures and in establishing systemic mechanisms to obtain funding.

/..

14.4. Over the past several decades it has become evident that the economic system cannot spontaneously solve the problem of global pollution and that external adjustment is required more urgently than ever before.

14.5. The only comprehensive attempt at creating an efficient system for financing environmental protection is the adoption of the Law on environmental protection in the Republic of Serbia, which has, regrettably, failed to produce any major effects in these times of crisis.

15. Science and technology

15.1. Technology and technological development have long been used as a vehicle of rapid social development while largely overlooking production efficiency and economy, protection of natural resources and environmental protection.

15.2. A technical-technological lag-behind is obvious. Part of the existing technologies and products fall short of current environmental protection requirements.

15.3. The protagonists of development are insufficiently motivated to improve the performance of technologies, products and services and to promote scientific-technological innovations, particularly in terms of environmental protection.

15.4. The projects and programs of the Federal Fund for promoting scientific- technological development of the Federal Republic of Yugoslavia do not cover all fields of environmental protection.

15.5. The information database for the intensive use of scientific, technological and business data under research projects on environmental protection and promotion is not adequately developed.

15.6. The multi-disciplinary approach and co-operation in elaborating major research projects, feasibility studies, general designs and detailed execution plans, expert studies and evaluation reports of specific research activities are unsatisfactory.

15.7. The organization and staffing of scientific institutions and their geographical distribution do not meet the needs of an efficient environmental protection and promotion system.

16. Informatics

16.1. A unified integral data system has not been developed.

16.2. Information on the state of the environment is still inadequate, slow and inefficient.

16.3. National statistics is not adjusted to the methodology of compiling relevant data for this field, and there is thus no information on the possibly appropriated corporate and household funds for environmental protection.

17. Education

17.1. Education is inadequately organized and the syllabi insufficiently focused, and no awareness raising plans are available in respect of the need for conserving the environment.

17.2. Training of professionals in integral environmental protection and promotion is unsatisfactory.

17.3. There is an acute shortage of qualified educators in the field of environmental protection and promotion.

18. International co-operation

18.1. International co-operation in the field of environmental protection is becoming increasingly important and intensive throughout the world. The Federal Republic of Yugoslavia was having very intensive and fairly successful international co-operation until the sanctions were imposed.

18.2. Yugoslavia has ratified 51 international treaties pertaining to environmental concerns.

18.3. International obligations have not been fully honoured nor systematically monitored.

18.4. The results achieved in international co-operation were inadequate due to inappropriate organization, financial constraints and other reasons.

18.5. The programs and projects, prepared for implementation as part of international co-operation with UNDP, UNEP, the World Bank, UNESCO, WHO, WMO, EUREKA, EUROMAR, the European Investment Bank, EBRD, the Hexagonale, Japan's technical assistance, the European PHARE program, bilateral co-operation with Italy and overall bilateral co-operation have been suspended or cancelled due to the current situation.

/...

IV. PROGRAMMES

Proceeding from the state and proclaimed objectives of environmental protection in the Federal Republic of Yugoslavia, the policy of environmental protection shall be implemented under the 12 Yugoslav programmes set out in this Resolution. All the programmes are of a continuous nature, while their contents shall be established for periods not shorter than a year, nor longer than five. The programmes include research on subject areas and legislation, as well as measures, activities and projects.

1. Programmes of Integral Environmental Protection and Promotion
(Programme 1. Integral Protection)

An integral and multidisciplinary approach to environmental protection and promotion is a basic precondition for the effective pursuit of this policy. To that end, the requisite legislative, organizational, institutional, administrative-legal, scientific and other frameworks need to be established, meaning that it is in particular necessary to:

1) put in place the legislation in the field of environment for the Federal Republic of Yugoslavia as a whole,harmonize relevant regulations, norms and standards, and introduce more stringent control of their implementation;
2) provide an integral system of environmental protection;
3) build an institutional framework to enable the administrative and consultative-operational structure for environmental protection and promotion to operate efficiently;
4) train administrators at all levels in efficient environmental protection, particularly at institutions engaged in the collection, use and analysis of data and information required for decision-making;
5) introduce economic instruments in the field of the environment, with a view to establishing a price mechanism for environmental (natural and man-made) resources so as to put in place an efficient system of distribution and utilization of these resources;
6) promote technical-technological measures and interdisciplinary scientific research as a basis for decision-making and identify advanced implementing solutions for this policy;
7) incorporate the basic principles of environmental protection, promotion and development, including demography, into educational programmes at all levels, with analyses of causes and other essential issues relating to the environment and development in the local context;
8) establish a comprehensive information system at all levels (individual to institutional) covering the state of the environment and the results achieved in the implementation of this policy; develop and apply new information technologies and an efficient system for
9) establish an integrated information system at the national level, including monitoring; a register of pollutants and a balance sheet of emissions; data on the quality of environmental elements and effects on public health; information in the sphere of regional planning; scientific-technological and business data and information on planning measures;
10) implement a public awareness programme covering environmental protection, through the mass media and public information services, with the participation of radio, TV, press and publishing agencies in popularization of environmental protection and promotion measures;
11) in the area of protection, lay emphasis on preventive actions, including impact assessments of the environment and human health, financial contributions by the state, incentives to scientific-research work and other necessary activities including rehabilitation;
12) apply the international agreements which Yugoslavia has ratified;
13) initiate activities for the Federal Republic of Yugoslavia to become party to new international agreements, and for its participation in the drafting thereof;
14) promote international cooperation.

2. Programme of Protection of Water Resources
(Programme 2 - Protection of Water Resources)

Under this programme, the Federal Republic of Yugoslavia shall ensure the conditions for this policy to be implemented through measures and activities making it necessary in particular to:

1) encourage the adoption of a dynamic, interactive and multiple approach to the protection of water resources;
2) adopt an Action Programme for protection of water resources relevant to the Federal Republic of Yugoslavia, along with an implementation schedule;
3) develop and use a constant water quality monitoring and evaluation system for the waterbodies and the sea of importance to the Federal Republic of Yugoslavia, and control discharges of hazardous and toxic substances into watercourses, lakes and the sea;
4) launch effective long-term programmes intended to prevent water pollution and enable water quality control;
5) adopt a programme and implement measures to ensure more rational per capita water consumption;
6) provide, by the year 2010, for the minimum per capita supply of 100 liters of clean water per day for the entire urban population, and for 75 per cent of the urban population to have their own or collective sanitary facilities (sewage systems, cess pools, etc.);
7) make a preliminary evaluation of the activities which can very adversely affect sea life and apply preventive, precautionary and anticipatory measures so as to avoid degradation of the marine environment and reduce the risk of long-term and irreparable negative effects;
8) encourage efficient information exchanges and, as appropriate, the strengthening of institutional links between national and interregional institutions in charge of water resources and development;
9) staff the competent institutions for water resources protection with adequate numbers of skilled and capable personnel trained in effective execution of the tasks in question;
10) prepare to take part in international programmes for the protection of water resources, such as GEMS/WATER (Global Programme for Monitoring Water Quality); EC Programme for the Danube, EMINWA/UNEP (Environmentally Sound Management of Inland Waters); regional FAO body for inland fisheries, implementation of the Convention on Swamps of International Importance (Ramsar Convention).

3. Programme of Soil and Ground Protection
(Programme 3 - Soil Protection)

Under this Programme, the Federal Republic of Yugoslavia shall provide the prerequisites for the implementation of this policy making it necessary to:

1) develop integral protection and rational soil exploitation;
2) adopt and implement a complete and comprehensive soil protection programme;
3) define measures aimed at reducing soil degradation caused by inadequate utilization of chemicals, as well as pollution with heavy metals and other eco-toxic materials;
4) introduce biological pest control methods;
5) ensure recultivation and use of deserted and degraded areas.

4. Programme of Air and Atmosphere Protection
(Programme 4 - Air Protection)

Under this Programme, the Federal Republic of Yugoslavia shall provide conditions for the implementation of this policy through measures and activities which make it necessary to:

1) adopt and implement a programme for limiting, reducing or controlling exhaust gas emissions, and control of other adverse effects of the transmission of air pollution on the environment;
2) adopt and implement a programme for promoting viable and environment- friendly energy resources (particularly new and renewable ones);
3) take into consideration the actual and potential changes in weather conditions and their socio-economic and environmental impact on planning and pursuit of policies and programmes for using land and marine resources and soil;

/...

4) enable systematic monitoring and evaluation of air pollution sources and its scope;
5) create possibilities for estimating and mitigating air pollution caused by industrial and nuclear accidents, natural disasters and deliberate or incidental destruction of natural resources;
6) adopt programmes for rationalizing energy consumption, for development, transfer and exploitation of energy efficient technologies and procedures which provide safe energy systems;
7) facilitate transfers of safer, more efficient and cleaner transport technologies on international, regional, subregional and national levels, as well as implementation of corresponding training programmes.

5. Programme of Forest Protection
(Programme 5 - Forest Protection)

Under this Programme, the Federal Republic of Yugoslavia shall provide conditions for the implementation of this policy through measures and activities which make it necessary to:
1) prepare and implement programmes and/or plans for forest protection, their conservation and sustainable development;
2) use to a higher degree the overall forest potential within the framework of maintaining and developing the natural values of forest ecosystems, promoting landscape quality and generally useful forest functions;
3) promote forest protection against fires and die-back;
4) develop and bring into use new and rational protection methods against forest diseases and pests;
5) put in place systems for evaluating and systematically monitoring the impact of programmes, projects and activities on the quality and volume of forest resources.

6. Programme of Protecting Sensitive Ecosystems
(Programme 6 - Protection of Sensitive Ecosystems)

Under this Programme,the Federal Republic of Yugoslavia shall ensure conditions for the implementation of this policy through measures and activities which make it necessary to:
1) establish criteria for the protection of sensitive ecosystems, bearing in mind that they are more sensitive to influences resulting from the utilization and exploitation of natural resources than other such similar complexes and that, as a rule, they represent an environment of high biodiversity;
2) define the limits, characteristics and methodology of monitoring the state of sensitive ecosystems on the territory of the entire country;
3) protect the most endangered stenoendemic plant and animal species and relics which are under the greatest pressure due to the development of tourism and construction of civil and military telecommunication facilities (relays, repeaters, cable railways, etc.);
4) prevent the negative effects of the local factors endangering all sensitive mountain ecosystems in Yugoslavia, namely the active and closed-down mineral exploitation sites, construction sites and ecologically unsafe traffic communication links;
5) halt further destabilization of sensitive forest ecosystems and preserve soil and climatic potentials;
6) establish the conditions which will give due consideration to the negative effects of river management, land drainage and retentions and accumulations on sensitive freshwater ecosystems;
7) protect lake ecosystems in mountainous regions and extremely sensitive and endangered water ecosystems, while recognizing that glacial lakes are particularly sensitive;
8) protect peat-marshes, bogs and mountain springs and wells, with their specific flora and fauna;
9) protect rare and sensitive brackish water ecosystems in the Federal Republic of Yugoslavia;
10) protect sandy soils and steppe ecosystems on loess terraces, deserts and breckland and specific ecosystems which are characterized by semi-desert ecological conditions.

7. Programme of Protection of Natural Heritage and Biodiversity
(Programme 7 - Biodiversity)

Under this Programme, the Federal Republic of Yugoslavia shall ensure conditions for the implementation of this policy through measures and activities which make it necessary to:
1) develop scientific selection and protection criteria for exceptionally valuable ecosystems;

/...

2) prevent excess construction development along the sea coast and lake shores;
3) restrict and monitor trade in rare plant and animal species;
4) establish a policy on biodiversity conservation and the sustainable exploitation of biological resources;
5) protect the world natural heritage on the territory of the whole country, international national parks and plant and animal species of international significance;
6) create conditions for agriculture to help protect biodiversity and prevent excess cultivation of uniform crops and excess use of chemical fertilizers and pesticides;
7) create the regulatory framework establishing national sovereignty over genetic resources and governing their collection;
8) create the prerequisites for introducing biodiversity preservation activities into forest management practices;
9) incorporate principles and measures for the preservation of biodiversity and sustainable use of biological resources into other sectoral policies.

8. Programme of Climate Protection *(Programme 8 - Climate)*

Under this Programme, the Federal Republic of Yugoslavia shall ensure conditions for the implementation of this policy through measures and activities which make it necessary to:
1) monitor world research on the interaction between socio-economic parameters and climate changes;
2) ensure better geographic coverage by stations of the Global Climate Observation System (GCOS) and its components, and particularly global monitoring of the atmosphere (GAW which comprises the BAMPON network and the global ozone measuring network), and establish and start up additional systematic monitoring stations;
3) ensure better cooperation in developing early detection systems for climate changes and atmosphere fluctuations, and in elaborating methodologies for identifying atmospheric pollution and gas concentrations which produce the 'greenhouse effect';
4) monitor systematically the effects of global changes on the climate in the Federal Republic of Yugoslavia;
5) formulate, carry out and regularly update national and, as appropriate, regional action programmes which cover measures for mitigating climate change and the effects on human health and adjustments to accommodate such changes;
6) promote cooperation with scientific, technological, technical, socio- economic and other organizations in systematic monitoring and development of climate system databases.

9. Programme of Protection of Architectural Heritage
(Programme 9 - Architectural Heritage)

Under this Programme, the Federal Republic of Yugoslavia shall ensure conditions for the implementation of this policy through measures and activities which make it neceesary to:
1) evaluate architectural heritage and determine the links between the facilities belonging to architectural heritage and their immediate environs in assessing the impact of future activities on the environment;
2) protect world architectural heritage in our country, including valuable complexes and individual landmarks,from decay and degradation caused by air pollution, acid rain, misuse and poor maintenance.

10. Programme for Management of Waste, Harmful Substances and Chemicals
(Programme 10 - Waste and Harmful Substances)

Under this Programme, the Federal Republic of Yugoslavia shall ensure conditions for the implementation of this policy through the measures and activities which make it necessary to:
1) ensure waste management and selection of safe waste disposal sites;
2) set up special-purpose funds for identification and rehabilitation of abandoned and uncontrolled hazardous waste dumps;
3) establish long-term programmes for reducing special and hazardous waste per unit of product, of generated energy and services rendered;

/...

4) establish long-term programmes for reducing the production and identifying new ways of using solid waste;
5) introduce technologies producing less waste and equipped for waste recycling in industrial production;
6) rehabilitate all existing waste dumps and ensure adequate disposal of new waste by the year 2015;
7) establish an appropriate register and monitor waste movement, from its source up to its final disposal;
8) provide for risk management in cases of industrial accidents;
9) adopt and implement a long-term programme for reducing hazards and threats of industrial accidents to the health of workers, of the population and to the environment;
10) ensure management of industrial and other harmful chemicals.

11. Programme of Protection against Ionizing Radiation
(Programme 11 - Ionizing Radiation)

Under this Programme, the Federal Republic of Yugoslavia shall ensure conditions for the implementation of this policy through measures and activities which make it necessary to:
1) establish long-term programmes for the control of radioactive waste of domestic origin;
2) adopt and implement a long-term programme for reducing risks and hazards associated with ionizing radiation;
3) overcome problems related to temporary storage of radioactive waste by the year 2015;
4) upgrade the system for monitoring the radioactivity of the environment;
5) establish a register and monitor radioactive waste movement, from its source to its final disposal;
6) strengthen the national potentials for controlling transboundary movement and halting illegal transboundary movement of radioactive waste.

12.Programme for Promotion of Regional Planning, Town Planning and Noise Abatement
(Programme 12 - Space and Noise)

Under this Programme, the Federal Republic of Yugoslavia shall ensure conditions for the implementation of this policy through measures and activities which makes it necessary to:
1) establish regional planning at the level of the Federal Republic of Yugoslavia;
2) take integrated protective measures against noise pollution.

To implement the programme covered by this resolution, priority measures and activities have been identified.

V. FINANCIAL INSTRUMENTS

Financial instruments and other incentives shall be used for the implementation of the environmental protection policy. Financial instruments for the implementation of this policy must be identified and implemented so as:
(1) to achieve the balance between the project oriented instruments of national, republican and regional significance;
(2) to establish the balance between certain project-oriented programmes under this policy, considering the priorities defined in its five-year implementing programmes;
(3) to make it impossible to finance projects which are already being financed from any other source or which would get funding even without these policy instruments, and
(4) to encourage local facilities to pursue active work in all areas of environmental protection and promotion.

The policy shall be implemented in the following manner:
1) By financing environmental protection and promotion programmes from the federal budget under a special selective item amounting to no less than 0.1 up to 0.3 % of the social product of the Federal Republic of Yugoslavia by the year 2000 and from the resources raised in terms of compensation fees for the utilization of natural resources, duties, taxes, contributions and other sources of funds for

environmental protection. The funds shall be used for the implementation of 12 programmes established by this resolution in the manner stipulated by special federal statute;

2) By exempting firms from tax payment in the amount which no less than the expenditures incurred by them in the fiscal year for the purpose of environmental protection and promotion, provided that the effects of those investments are visible in practice and that they may be proved by measurements; incentives given for domestic technology, know-how, equipment and inputs geared to protecting the environment;
3) By introducing tariff and import duty exemptions for: equipment, chemicals, spares, inputs, components, software and other essentials for environmental protection and promotion;
4) By raising export incentives for clean technology products and services and for products of the organizations having already introduced environmental protection systems and able to prove that they do not pollute the environment beyond the permitted thresholds by means of certificates issued by duly authorized organizations;
5) By exempting from import duties books, magazines, information and communication installations and other equipment used specifically for environmental protection and promotion activities;
6) By making larger foreign investments, particularly by multinational companies, conditional upon mobilization of domestic resources in research and development of environmental protection and promotion technologies;
7) By introducing "ecological" labels for environment-friendly products turned out by clean technologies;
8) By rectifying distorted price relations between natural and man-made resources which lead to their depletion and by building real environmental costs into the price of each and every product;
9) By promoting legislation enabling gradual introduction of the 'polluter pays principle' by the year 2005 (any manufacturer or supplier of services polluting the environment shall be fully liable for ensuing damages and, hence, bound to compensate the damage-related costs and bear in full the commercial cost of pollution control);
10) By further refining the legislation to enable mandatory "environmental" insurance coverage as well as that against liability for environmental damage caused by the insured.

VI. EVALUATION

The implementation of the environmental protection policy shall be subject to scientifically based and impartial evaluation which shall include, as a minimum, the following:

1) policy evaluation based on the state of the environment for the given year and the comparison of that state of affairs with the one prior to the formulation of this policy in the light of the existing economic imbalances (due to that 1990 shall be taken as the reference year);
2) evaluation of programmes, measures and activities for promoting standardization, quality, methodology and patents, to be made for each five- year period;
3) evaluation of this policy in general and of each individual programme at the close of each five-year period. The Federal Government shall recruit an independent team of experts for the purpose, possibly through international organizations (OECD, Commission of the European Communities, UNESCO, WHO, UNDP, UNEP, Council of Europe). On the basis relevant findings, the Federal Government shall amend the policy instruments in form and substance;
4) evaluation in terms of public health: primary health care, control of communicable diseases, protection of at-risk groups, taking up health risk challenges in urban areas and reducing risks caused by environmental pollution and industrial accidents;
5) evaluation of economic efficiency of the relevant implementing measures, including the efficient use of the funds channelled for the purpose;
6) evaluation of the quality as well as the economic efficiency and rationality of the institutions charged with monitoring the state of the environment and of the management supervision services.

VII. PLANNING AND MONITORING

The Federal Ministry of the Environment shall monitor the following:

1) Basic trends in the development, execution and implications of the policy and of the environmental protection and promotion technology on the global level as well as in the countries whose

/...

developmental and economic policies have an impact on the development of the Federal Republic of Yugoslavia;

2) Long-term needs and commitments of the Federal Republic of Yugoslavia with respect to environmental protection and promotion and sustainable development,reflecting in particular the economic utilization and higher evaluation of the country's natural and man-made values;
3) The status, problems and trends of environmental protection and promotion on the global, regional and national levels;
4) The progress and problems in implementing the environmental policy, effects of public investments in the conservation and improvement of the environment and quality of the results achieved;
5) The pace, scope and extent of diffusion of clean technologies in the domestic enterprise sector and the obstacles identified so far;
6) Other environmentally-relevant factors.

The Federal Ministry of the Environment shall produce at the close of each year the following reports for submission to the Federal Government:

- Report on the state and problems of environmental protection and promotion in the country;
- Report on the implementation of the environmental protection and promotion policy in the course of the year.

The above reports shall also cover the activities by advisory and other bodies in the field of environmental protection and promotion.

The above-mentioned reports shall serve as the basis for drafting an Environmental Protection and Promotion Policy Implementing Plan and for laying down the responsibilities of all those involved in its execution.

The Annual Environmental Protection and Promotion Policy Implementing Plan shall primarily set out the following:

1) Measures and priorities to implement the Environmental Protection Policy in respect of each of the 12 Programmes, the amount of work and funds needed for every sub-programme and each project and measure forming part of the programme (1-12), which are to be financed fully or in part under the special selective item of the federal budget set-aside for the protection and improvement of the environment;
2) Outlays to cover material costs of monitoring the state of the environment under the programme of the Federal Ministry of the Environment;
3) Substance and specific programmes of international cooperation and the commitments under international agreements, plan of participation in the work of international bodies and organizations with respect to that cooperation, technical cooperation plan, programme for linking-up with international environmental infrastructure and its utilization to meet domestic needs;
4) Research and consultancy needs of the Federal Assembly and the Federal Government in the field of environmental protection and promotion;
5) The environmental system evaluation plan, programmes, sub-programmes and projects to be financed fully or in part under the selective item of the federal budget set-aside for the protection and promotion of the environment and the relevant Spending plan.

Annual environmental policy implementing plans shall be worked out in cooperation with the Federal Government departments concerned and the respective Ministries in the member republics. Such plans shall be adopted by the Federal Government at the proposal of the Federal Ministry of the Environment.

VIII. COOPERATION WITH THE MEMBER REPUBLICS

In determining and implementing the Environmental Protection and Promotion Policy of the Federal Republic of Yugoslavia, the Federal Government and the Federal Ministry of the Environment shall cooperate with the governments and the competent ministries of the member republics. In doing so, they shall fully observe the following:

1) the constitutional competences in the field of environmental protection;
2) the principle that the Federal Government and the governments of the member republics shall intervene solely in such environmental protection and promotion areas where work cannot be pursued by relying on market forces;

/...

3) the essential need for all elements of the Environmental Protection and Promotion Policy to be covered by the government policy and its implementing acts so as to make the environmental protection and promotion system an integrated whole;
4) the complementary nature of the environmental measures and activities adopted and implemented by the Federal Government, the governments of the member republics and by local self-government authorities and the need to eliminate duplication and competition in executing these measures;
5) the limited budget for funding and stimulating environmental protection and promotion outside the scope of this resolution, which amounts to 1% of the GSP of the Federal Republic of Yugoslavia for the year in which the relevant public tasks are executed.

Federal Government, Dr. Radoje Kontić,
sgd.,Prime Minister,E.p. No. 290, June 4, 1993

/...

ANNEX 1.

PRIORITY MEASURES AND ACTIVITIES IN THE FIELD OF ENVIRONMENTAL PROTECTION

The environment can be improved only by the pursuit of adequate policy with public support. The current process of political, social and economic changes in the Federal Republic of Yugoslavia provides the possibility of introducing the environmental protection policy through systemic measures contained in this policy. The economic transformation, introduction of market economy and privatization, liberalization of the majority of administrative prices, create the conditions for environmental protection and promotion.

The proposed priority measures and activities proceed from the assumption that the sanctions will be lifted and that changes that have been embarked upon will be successfully finalized. The proposed measures and activities will be operationalized by annual and five-year plans which will define the protagonists, methods of work and the required funds.

The measures are of preventive, rehabilitational and developmental nature, and are planned for short-term and long-term periods. Of the set of measures envisaged with a view to attaining the targets, only the crucial ones are presented in these priorities, and the programme of measures and activities remains open for annual up-dating. The republics, especially the ecological state of Montenegro, can do even more.

Preventive measures are intended to prevent pollution at its source, rehabilitation measures are to improve the state of the environment in areas and settlements with critical exposure to pollution. These are mostly short-term measures, but may also be long-term and developmental.

Developmental measures are intended to preventively preserve the environment from new degradations and to ensure a sustainable growth. These measures are planned within the socio- economic and technical-technological development and are implemented by appropriate economic policy instruments, urban and territorial planning and the investment policy in which the reception capacity of the space is taken into consideration. The developmental measures are mostly long-term.

The sources of funds for environmental protection and promotion, in compliance with the environmental protection policy, encompass: budgetary funds, taxes and contributions; resource utilization charges, funds which due to tax and customs reliefs for on-going capital and rehabilitation programs remain available to the existing and potential pollutants; fund receipts; funds of direct users of space, as well as all payments by the pollutants and users of funds raised for environmental protection purposes.

1. **Jurisdictional delimitation in the field of environmental protection**. The competent republican and federal authorities and those concerned shall by mutual agreement, proceeding from the Constitution of the Federal Republic of Yugoslavia and the principle of integral approach, propose jurisdictional delimitation of the ministries of environment of the federal state and the republics, as well as other ministries in this field, on which bases the respective laws shall be harmonized and supplemented.

2. **Adoption of a federal law on the bases of environmental protection**. By the end of December 1993. the Federal Ministry of Environment shall propose a law on environmental protection which shall be based on the latest scientific knowledge and the Yugoslav specificities and take into consideration the internationally established standards, whereas its implementation shall hinge on the adoption of by-laws and harmonization of the existing federal laws and other regulations, by individual environmental segments.

3. **Introduction and promotion of inspection service**. It is necessary to organize, or to promote, within the federal and republican authorities in charge of environmental protection,the inspection service for supervision of the implementation of laws governing environmental protection and promotion.

/...

4. **Environmental Impact Assessment as a normative form of harmonization of relations between the investor and the entity which represents the common interest**. A special federal regulation shall establish the content of the assessment, the method of elaboration and the modeof public verification of the environmental and human health impact assessment, as an investment document which harmonizes the interests of the investors and the entities which represent the common interest in the preservance of natural and man-made environment.

5. **Adoption of Yugoslav standards, norms and technical conditions in the field of environmental protection**. Actitivites shall be intensified inpreparation and adoption or up-dating of the Yugoslav standards, norms and technical conditions pertaining to the environmental protection, harmonized with specific branch and international regulations, in the following areas: the quality of natural resources by intended utilization; raw materials and energy consumption in the process of production; quality, shelf-life, safety and functionality of products; regulation of emissions, including all types of ionizing radiation resulting from the type of product and the process and quality of production; sampling, measurement and invironmental impact assessment procedure; measurement control equipment and instrumentation for monitoring and control of the state of the environment; foodstuffs quality, including the quality of waters used in their processing; and other norms in the field of environmental protection.

6. **Improvement of organizational-institutional conditions**. The law on the bases of environmental protection shall establish the bases for the improvement of organizational- institutitonal conditions in the field of environmental protection, especially linkage of the existing institutions, as well as organization of the system of reference laboratories as government agencies for the control of work of participants in the assessment of the quality of the environment.

7. **Establishment of an adequate organizational structure for monitoring the state of the environment**. Based on their mutual agreement, competent federal and republican authorities shall define the organizational structure of the institutions and the needs for improving their program of work. This shall be the basis for preparing and adopting a programme of integrated monitoring of the state of the environment and pollution in the Federal Republic of Yugoslavia.

8. **Regulation of the trade and use of chemicals.**The federal laws nad related regulations on trade and use of chemicals shall be up-dated in accordance with the new knowledge. The existing laws and regulations at the republican levelshould be brought in compliance with the federal laws and international regulations, in order to establish control and registration of trade between republics and international trade.

9. **Reliefs for rehabiliation programs**. Conditions for obtaining tax and customs concessions shall be elaborated, for the use by pollutants during rehabilitation programs, as well as the conditions for borrowing from the funds for rehabilitation purposes.

10. **Harmonization of economic instruments and environmental requirements**. Customs, lending, tax and other economic measures intended for environmental protection shall be elaborated, especially the indirect tax with a clear ecological objective (e.g. on plastic bags, pesticides); indirect tax which is not imposed due to ecological reasons but produces ecological effects (e.g. on passenger cars and fuel); direct taxes (accelerated depreciation, amortization) for investments in environment, as well as parafiscal instruments (allowances related to water supply, aircraft take-offs and landings, etc).

11. **Provision of funds for environmental protection and promotion and for hazardous waste disposal**. The law on the bases of environmental protection shall define the bases for providing the funds for environmental protection and promotion. The management and use of all these environmental funds shall be regulated by separate federal and republican regulations.

/...

12. **Production, procurement and standardization of control and measurement equipment and instrumentation**. The legal and economic measures shall encourage domestic manufacturers to develop, produce and service the measurement, control and other equipment and instrumentation which is used in the field of environmental protection, adjusting it to the specific requirements.

13. **Rational use of energy and natural resources**.The policy and plans of development of energy, use of energy and natural resources shall be channeled towards the reduction of energy consumption in all sectors, so as to include the provision of technical-technological conditions for rationalization of primary power generation, power transformation, transmission, distribution and use of energy and systemic solutions for their implementation, including organization, incentives, training of the staff, raising of public awareness, normative and legal regulation.

14. **Restriction of trade and sales on products which do not comply with the international standards of environmental protection**. For technologies and final products which do not comply with the international standards of environmental protection, the ban on sales in the domestic market shall be introduced. It is necessary to, in cooperation with the OECD and the Commission of the European Community (CEC), inspect and assess the goods and production technologies which do not comply with the UNEP and CEC directives or OECD recommendations, and inform the manufacturers accordingly.

15. **Encouragement of research in natural sciences**. Within the scientific-research institutions, research directed towards the creation of scientitic foundations for studying, monitoring and understanding of the impact of pollution on the state of the environment shall be encouraged.

16. **Encouragement of research on the right and management of environmental protection**. Theoretic research on the right to a healthy environment as one of the basic human rights shall be promoted. The areas of competence of the federal institutions, territorial, administrative, inspection and other agencies and organisations at the level of the republics, regions or communes shall be reviewed and adjusted, by relying on the scientificfoundationsfor developing management in theory and practice (system analysis, decision-making analysis) and the impact of democratic principles within the state community.

17. **Introduction of performance standards by licencing of the technological process**. Separate regulations shall make the issuance of work permits (licences) for specific technological processes (production or any other activity) conditional on the estimated and predicted impact of the process and its result (products in use, product leftovers after use, waste materials) on the environment.

18. **Development of an integrated pollutants' registry for the Federal Republic of Yugoslavia**. By the end of 1993 the Federal Ministry of Environment shall elaborate the methodology and instructions for developing an integrated environmental polluters' registry. By the end of 1995 the registry shall be put together and entered on a GIS system. This task shall be carried out simultaneously with the development of the environmental data system taking also into consideration its compatibility with the general data system for the Federal Republic of Yugoslavia.

19. **Elaboration of an integrated data system for the environment and support of environmental decision-making**. On the basis of the Law on the bases of environmental protection a regulation on the operation of the environment data systemand its pace of development shall be adopted. The data system shall comprise several subsystems to be defined in the course of the first developmental stage. The regulation shall be adopted after a blueprint of the data system has been elaborated, and the data system shall be developed by the year 2000 in the following stages: blueprint (1993-1994), hardware and software implementation project (1995), functional project (1996), detailed data bases project (1996) and implementation and training in utilization (1997-2000). The system is to be modular and distributed and specific modules can be developed at an accelerated pace.

/...

20. **Gathering of data for the data system**. The Law on the bases of environmental protection shall prescribe that all entities - protagonists of development, i.e. users of resources and natural resources (government agencies at all levels, scientific-research institutions and universities, economic organisations, funds of the health care system, water management, research, tourism, transport and roads, utilities, professional andscientific associations) shall forward data obtained in the course of their normal operation, at a normal pace and in a standardized format, to an entity designated by law and depending on the conditions within the data system.

21. **Promotion of the public awareness system for the environment**. To adequately preserve and promote the environment,on the principles of a sustainable growth, the public information and awareness system for environmental protection must provide conditions for the provision of accurate and scientifically-based data. To that end, the area of information shall be expanded, enriched in content and form and adjusted to different types of data users, by age and educational level.

22. **Definition of the concept of comprehensive educationfocusing on environmental problems**. Work to create a comprehensive (multi-disciplinary) concept of ecologically guided education encompassing all levels from pre-school to university education shall be initiated.

23. **Execution of ratified international treaties**. Enforcement of the effective conventions in the country, i.e. fulfillment ofthe obligations assumed shall be reviewed, and concrete proposals given on ways of further developing country legislation (laws and other regulations at federal and republic levels) to ensure their efficient application.

24. **Bilateral co-operation with neighbouring and other countries**. The Federal Government shall seekto co-operate in environmental matters primarily with the neighbouring countries and shall sign bilateral co-operation agreements if necessary.Co- operation shall also be established with other states in matters of mutual concern.

25. **Endorsement of international treaties that have not yet been signed**. The international treaties which the Federal Republic of Yugoslavia is not yet party to but are deemed of exceptional significance to the country shall be endorsed, and the necessary supplements to country legislation (laws and other regulations at federal and republic levels) shall be proposed so as to bring the relevant federal regulations in compliance with the requirements and standards of the international community.

26. **Co-operation with the UN system at global, international level**. The FRY shall actively participate in international meetings and expert gatherings within the UN, under UNEP programs and projects, and in the transfer of acquired knowledge, support and equipment into the country. Participation in international co-operation will make it possible for the Federal Republic of Yugoslavia to fulfil part of its obligations vis-a-vis the international community, use the results and know- how in the country, market domestic experts and institutions internationally, engage international resources and equipment in addressing major environmental problems in the country.

27. **Co-operation with regional and sub-regional organisations**. The Federal Ministry in charge of environment shall, in co-operation with the republicministries and the federal agencies concerned, organise cooperation at regional and sub-regional levels through participation in international meetings,expert gatherings, projects and through an active transfer of acquired knowledge and use of all available modalities of support.

28. **Co-operation with the World Bank and with other international financial organisations**. The Federal Ministry in charge of environment shall, in co-operation with the republic ministries concerned, annually up-date environmental project proposals to be submitted to international organisations for co- operation and support, as most of the major environmental projects in the Federal Republic of Yugoslavia are impossible to implement without international financial support.

/...

The Ministry will co- operate in particular with the fund established by the developed countries to assist the underdeveloped countries in addressing global environmental concerns (GEF).

29. **Provision of integrated policy and decision- making procedures, including the sectors concerned that should stimulate compatible and balanced use of water resources and seas.** By the end of 1994 the Federal Ministry in charge of environment shall work out the instructions on the mode of decision-making and procedures for the large-scale investment works which are related to the utilisation of water resources and seas or may have an impact on such resources on the basis of environmental impact assessment regulations.

30. **Elaboration of an evaluation methodology for water resources and the water management balance sheet of the Federal Republic of Yugoslavia, including impact evaluation of climate changes on the water resources of relevance to the Federal Republic of Yugoslavia.** By the end of 1995an evaluation methodology for water resources of the Federal Republic of Yugoslavia shall be elaborated along with an integrated water balance sheet of the Federal Republic of Yugoslavia.

31. **Long-term Program for protection of surface and ground waters in the Federal Republic of Yugoslavia.** By the end of 1993 the Federal Ministry in charge of environment shall adopt the terms of reference for elaborating a long-term programe for protection of surface and ground waters in the Federal Republic of Yugoslavia. On the basis of the adopted terms,the Program itself shall be elaborated and is due to be adopted by the end of 1994.

32. **Soil protection against degradation and excess use.** In conformity with the latest achievements and specificities and possibilities of our country,a soil protection system against degradation and excess use shall be developed by spatial management and other measures on the basis of ecological considerations.

33. **Joining the systematic background air pollution monitoring program.** The Background Air Pollution Monitoring Network - BAPMON has been organized within the Global Environmental Monitoring System (GEMS) and will be expanded to meet needs within the available possibilities. Apart from the basic programme, these systematic measurements shall be supplemented with a rainfall analysis in compliance with European monitoring and evaluation program for long-distance transmission of polluting substances (EMEP).

34. **Promotion of forest protection.** To ensure integrated planning of forest management and forestfunctionality, and in conformity with the latest international principles on forest management, relevant protective measures and activities shall be harmonized and promoted, particularlythe specific protective measures to prevent the dying of forests.

35. **Adoption of a biodiversity preservance policy in the Federal Republic of Yugoslavia.** By the end of 1993, the Federal Ministry in charge of Environment shall, in collaboration with the republic ministries and scientific institutions, propose a policy to preserve biodiversity along with the instruments to incorporate it into the relevant sectoral policies (development of agriculture, forestry, etc.)

36. **Promotion of data on biodiversity and its utilisation.** The Federal Ministry in charge of Environment shall organise work so asto build adata sub-system on biodiversity within the environmental data system thus paving the way for application and use of bio-indicatorsin environmental monitoring in the Federal Republic of Yugoslavia.

37. **Protection of natural heritage.** A natural heritage protection system including protection of biodiversity centres shall be elaborated bystipulating the conditions for construction, movement and stay in national parks and especially valuable nature preserves and ecotones by applying international criteria (UNESCO, UNEP, IUCN, WWF and others) so as to preserve rare and imperilled plant and animal species, important biocenoses or ecosystems.

/...

38. **Promotion and research in biodiversity and biological resource management**. The Federal Ministry in charge of Environment shall prepare a program of measures and activities for promoting research in biodiversity and organise work on the production of a "Red Book" on vascular plant and animal life of verterbrae in the Federal Republic of Yugoslavia, identification of biodiversity centres and up-dating of the vegetation map of the Federal Republic of Yugoslavia.

39. **Priority programs in the area of monitoring research into climate and climate change**. A Yugoslav climate change program shall be adopted which will encompass climate research monitoring in the Federal Republic of Yugoslavia reflecting global climate changes;development of a climate change forecasting model; monitoring of gases producing the 'greehouse effect'and measures to stabilize such gas emissions; development of strategies for adaptation and mitigation of climate change effects.

40. **Protection of architectural heritage**. The cultural-historic merits of architectural heritage, particularly from the list of the world's cultural heritage, including ambience merits and archeological sites should upon evaluation be protected under spatial management plans against inappropriate spreading of urban agglomerations, tourist resorts, construction of roadand other infrastructural facilities. The laws and regulations shall encourage the enterprise sector and individuals to finance activities for the preservation of such landmarks.

41. **Waste management**. Under the Law on the bases of environmental protection, federal regulations shall be adopted for the treatment of solid, special and dangerous waste in conformity with international treaties and regulations in the area of the environment.

42. **Selection and management of waste disposal sites**. Under the Law on the bases of environmental protection federal regulations shall be adopted laying down the criteria for selection and management of dumps for solid, special and dangerous waste, in keeping with international standards.

43. **Reduction of waste creation and encouragement of solid waste recycling**. A program of measures to halt further intensive growth of communal waste creation shall be adopted to bring it down by the year 2010 below the current level in the most developed EC countries.In the area of packaging, further weight growth of packaging per unit of product should be halted by the year 2000 to bring it percentagewise into line with the trends in the EC countries. A national program for stepping up solid waste recycling shall be adopted so as to operationalise the basic premises of the strategic goal in this area;propose the necessary implementing measures; formulate adequate regulatoryand economic measures and framework to stimulate reclaim and recycling of solid waste and measures to restrict and discourageunrational practices.

44. **Reduction of risks of industrial accidents**. A comprehensive risk management system shall be adopted gradually and shall encompass the putting together of a detailed registry of potentially dangerous activities with risk estimates; taking of preventive and emergency (///) measures; establish plans of conduct and response measures at the site of a possible accident as well as in the potentially imperilled area. The law shall regulate the obligations of the industrial entities and government authorities, the formulation of a rks evaluation and management methodology (on the basis of international recommendations of UN, EC), strengthening of management possibilities and capacities and response in case of an accident, establishing international co- operation with a view to reducing the risk of transboundary effects of industrial accidents, participation of the public in decision-making on all salient matters pertaining to planning, construction and management of dangerous activities which may cause industrial accidents.

45. **Management of industrial and other dangerous chemicals**. A long-term program of measures and activities for managing dangerous chemicals shall be adopted with a view to reducing their harmful effect on the environment and human health.

46. **Safe management of radio-active waste**. The radio-active waste management system including safe management, transport, temporary storage, final disposal, reduction of such waste creation to a minimum, continuous and fair public information on the hazards of radio-active waste, involving the public in decision-making on all salient developmental and investment plans and further total restriction on imports of radio-active waste in conformity with international recommendations and criteria shall be promoted.

47. **Promotion of regional and town planning.** Integral regional and town planning in the Federal Republic of Yugoslavia shall be ensured at all levels. In the framework of integral planning, special attention shall be paid to regional planning in special purpose areas (protected nature reserves, areas with significant geological resources, tourist regions, infrastructural corridors, architectural heritage, etc.).

48. **Defining of the role of regional and town plans as part of preventive activities for environmental protection.** The Law on the basic principles of environmental protection shall envisage that regional plans, based on scientifically established criteria for the use of space and protection of the environment serve as the point of departure for preventive environmental protection and promotion.

49. **Noise abatement activities.** A programme on noise abatement shall be adopted, and legislation regulating the highest permissible noise levels at work places, in urban centres and transport updated.

UNITED
NATIONS

A

General Assembly

Distr.
GENERAL

A/C.2/48/11
26 November 1993

ORIGINAL: ENGLISH

Forty-eighth session
SECOND COMMITTEE
Agenda items 91 (e) and 99

DEVELOPMENT AND INTERNATIONAL ECONOMIC COOPERATION: ENVIRONMENT

IMPLEMENTATION OF DECISIONS AND RECOMMENDATIONS OF THE UNITED NATIONS CONFERENCE ON ENVIRONMENT AND DEVELOPMENT

Letter dated 22 November 1993 from the Chargé d'affaires a.i. of the Permanent Mission of Yugoslavia to the United Nations addressed to the Secretary-General

I have the honour to transmit information on the effects of the sanctions in the field of the environment in the Federal Republic of Yugoslavia (see annex).

I should be grateful if you would have the present letter circulated as a document of the General Assembly under agenda items 91 (e) and 99.

(Signed) Dragomir DJOKIC
Ambassador
Chargé d'affaires a.i.

93-66246 (E) 291193 291193

/...

Annex

EFFECTS OF SANCTIONS INTRODUCED BY THE INTERNATIONAL COMMUNITY AGAINST THE FEDERAL REPUBLIC OF YUGOSLAVIA IN THE FIELD OF THE ENVIRONMENT

Although the environment has not been specifically mentioned anywhere in Security Council resolutions 757 (1992), 787 (1992) and 820 (1993), it has been seriously affected by the sanctions. The extremely negative effects in that field cannot be viewed in isolation from the overall damage caused to the economic and social development of the Federal Republic of Yugoslavia, since the environment is an integral part of development which, as an option of the international community, was confirmed at the United Nations Conference on Environment and Development held in Rio de Janeiro in June 1992. The difficulties therefore encountered due to the sanctions have a harmful effect both on Yugoslavia's internal development and on its cooperation with foreign countries, resulting in direct or indirect devastating consequences in the field of environmental protection and promotion.

Sustainable development in Yugoslavia, as in other developing countries, is possible to achieve only if new and additional financial assistance and access to safe and environmentally sound technologies are ensured. With the imposition of the most comprehensive embargo ever established against any State, the fulfilment of commitments undertaken at Rio by Yugoslavia becomes impossible.

The sanctions are contrary to numerous international documents in the field of environment. They derogate one of the fundamental premises of the Conference concerning the establishment of partnership among the components of the international community, without discrimination and isolation of any country or nation.

The adverse effects of the sanctions, particularly the long-term and indirect ones, are immeasurable because environmental concerns and development issues cannot be viewed only in terms of local effects. The scope of these effects is broader and multidimensional.

In conditions characterized by the effects of the sanctions, particularly by their tightening provided for in Security Council resolution 820 (1993), the already adverse trends in the economy of the Federal Republic of Yugoslavia have deteriorated. The rate of unemployment has increased, social tensions have intensified, markets are being closed, transfer of know-how and technology has come to a stop and international cooperation has been almost completely interrupted, while, wittingly or unwittingly, the exploitation level of natural resources, even of those under the regime of special protection has risen significantly, increasing the risk and threat to natural resources and cultural monuments and diminishing the readiness of and possibility for society to invest in environmental protection and promotion. The cutting down of forests for firewood as a source of energy, particularly in the most affected zones and adjacent settlements, has brought about increasing emissions of pollutants into the air and water and a lasting or long-term degradation of flora and fauna. Substitution for imported fuels used in industry and homes (oil and gas) of fuels of domestic origin (coal) has resulted in increased environmental

pollution. The shortage of fuel has further increased the danger of the "high risk" regime of production and maintenance with all its side-effects.

Trends in industrial production in the Federal Republic of Yugoslavia registered a dramatic downward turn as early as last year. Although at first glance it could be concluded that in the purely environmental sense, reduced production, and especially the production of large pollutants, contributed to the quality of the environment, the economic effects are such that they do not ensure even simple reproduction, let alone the prospects for further development, in particular on the basis of new technologies, which should contribute to the preservation of the environment and its quality.

Due to the suspension of foreign trade relations of Yugoslavia, and especially due to the diminishing availability of energy, the economy of the Federal Republic of Yugoslavia will increasingly resort to the exploitation of its own energy sources, which, on the one hand, puts in jeopardy the quality of the environment (thermoelectric power plants, forests etc.) and, on the other, increases the exploitation level of natural resources, which, as a consequence, threatens the biological balance and the functioning of other ecosystems.

The sanctions and their effects diminish the financial potential of the country, thus reducing the possibility and readiness of society to invest in environmental protection and promotion.

In addition to sanctions, the civil war on the borders of the Federal Republic of Yugoslavia is another pollution risk. There is no doubt whatsoever that this factor increases the pollution "imported" into Yugoslavia from other countries, just as it accounts for increased pollution "exported" from Yugoslavia to other countries since air, water and soil pollution know neither of national nor of any other borders.

The risks of the illegal import of hazardous waste and accident-induced pollution are also much greater.

Because of the sanctions, it is not always possible to substitute in an adequate manner imported raw materials and intermediaries, among other things, because of technological limitations and the quality of domestic raw materials and intermediaries. This is a frequent cause of an even greater level of environmental pollution, the effects of which can exceed local proportions.

The ecological blockade affects all the citizens and threatens the rights of every man to a sound environment. The lack of spare parts alone leads to increased risks of ecological accidents, air and water pollution, deforestation etc. Not only are the consequences of these of local character but they can also adversely affect areas far beyond Yugoslavia's borders in the form of transboundary pollution.

The sanctions have rendered impossible the implementation of a particularly important environmental project: the idea of Montenegro as an environmental State.

Because of the sanctions and their adverse effects on the overall development of the country, the natural and cultural heritage under the

protection of the United Nations Educational, Scientific and Cultural Organization (UNESCO) (Durmitor, Kotor, Studenica, Sopocani) has also been brought into question.

One of the most negative effects of the sanctions is the suspension of international cooperation in the field of the environment. International financial support envisaged and internationally verified for 23 projects on the territory of the Federal Republic of Yugoslavia, amounting to approximately US $1.5 billion, has failed to materialize with long-term and lasting consequences for the development and quality of the environment.

Withholding of scientific and technical cooperation has manifold negative consequences for the environment. Study visits and participation at seminars, as well as the use of databases within the framework of numerous international and regional organizations (the United Nations Environment Programme (UNEP), the Mediterranean Plan of Action, cooperation of Black Sea countries, regional cooperation in the protection of the Danube, etc.) have been reduced to the minimum and the indications are that Yugoslav experts will be invited to these meetings less and less.

The isolation of the Federal Republic of Yugoslavia has brought about an almost complete information blockade and a discontinuation of almost all forms of communications with the outside world, bringing into question thereby numerous activities connected with the protection and promotion of the environment with adverse effects on the environmental, economic and social status of the population.

Although the Federal Republic of Yugoslavia is the signatory of 51 international conventions in the environmental field, due to the sanctions their implementation has become extremely difficult. The sanctions have created many difficulties for Yugoslavia in its implementation of the Vienna Convention for the Protection of the Ozone Layer and the Montreal Protocol on Substances that Deplete the Ozone Layer, since it is becoming ever more difficult for it to replace chlorofluorocarbon technologies.

One of the vitally important fields in which international cooperation has been suspended due to the sanctions is the protection of the Adriatic Sea and of watersheds. These problems cannot be the sole responsibility of the Federal Republic of Yugoslavia, but call for cooperation by neighbouring countries and for broader regional cooperation.

The sanctions have extremely negative effects on the system of controlling and monitoring the quality of the environment, the consequences of which can bring about the disintegration of the system because of the limited availability of funds and the lack of various components necessary for the regular operation of that system and the entire system of environmental protection.

Each individual should be accorded equal treatment in the field of the environment. The unjust sanctions against the Federal Republic of Yugoslavia, which is an inseparable part of the international community, should be lifted as soon as possible in order to avoid the ever more disastrous effects on Yugoslavia and indirectly on the entire international community.

APPENDIX

According to the information of the competent authorities of the municipality of Pljevlja, toxic substances released in the waterways of the Čehotina and Vezicnica rivers caused an ecological catastrophe. Due to radioactive and toxic waste, living organisms in those two rivers perished. One of the reasons for this ecological catastrophe is that to a certain extent the Pljevlja thermal power station cannot maintain the adequate production process due to the lack of spare parts. Further shortage of spare parts may result in additional pollution.

As a result of the energy crisis in the Federal Republic of Yugoslavia in the wake of the sanctions, and the inability to import oil and oil derivatives, as well as the increased prices of coal, there are instances of large-scale deforestation. During this year, 66,182 cubic metres of timber have been cut illegally - 4,635 in Montenegro, 12,433 in central Serbia and 48,091 in Kosovo and Metohija. According to the latest information, in the region of Sandzak, large quantities of timber were cut down for heating purposes in the approaching winter (in cubic metres: Sjenica, 523; Rožaj, 3,620; Tutin, 4,018; Novi Pazar, 563; and Raška, 103). Not only would further illegal cutting down of forests have negative consequences of a local character but it may have global consequences for the functioning of other ecosystems and the environment in general.